We Claim:

1. A method to determine the degree of serum cholesterol elevation which will occur in a patient during treatment with an immunosuppressant medication comprising:

a) determining for the two copies of the IL-1β gene present in the patient the identity of the nucleotide pair at the polymorphic site -511 C→T (at position 1423 of sequence X04500) of the IL-1β gene; and

b) assigning the patient to a high cholesterol elevation group if both pairs are AT, assigning the patient to an intermediate cholesterol elevation group if one pair is AT and one pair is GC and assigning the patient to a low cholesterol elevation group if both pairs are GC.

2. A method to treat a patient with an immunosuppressive medication comprising:

a) determining for the two copies of the IL-1β gene present in the patient the identity of the nucleotide pair at the polymorphic site -511 C→T (position 1423 of sequence X04500) of the IL-1β gene; and

b) treating the patient with the immunosuppression medication if both pairs are GC and using alternative treatment if one pair is AT and one pair is GC or if both pairs are AT.

3. The method of claim 2, wherein the immunosuppressive medication is selected from the list in Table 2.

4. The method of claim 3, wherein the immunosuppressive medication is everolimus.

5. The method of claim 2, 3 or 4, wherein the alternative treatment comprises the addition of a cholesterol-lowering medication chosen from those listed in Table 1.

6. A method to determine the degree of serum cholesterol elevation which will occur in a patient during treatment with an immunosuppressant medication comprising:

a) determining for the two copies of the IL-1β gene present in the patient the identity of the nucleotide pair at the polymorphic site -31 T→C (position 1903 of sequence X04500) of the IL-1β gene; and

b) assigning the patient to a high cholesterol elevation group if both pairs are CG, assigning the patient to an intermediate cholesterol elevation group if one pair is AT and one pair is GC and assigning the patient to a low cholesterol elevation group if both pairs are AT.

7. A method to treat a patient with an immunosuppressive medication comprising:

a) determining for the two copies of the IL-1β gene present in the patient the identity of the nucleotide pair at the polymorphic site -31 T → C (position 1903 of sequence X04500) of the IL-1β gene; and

b) treating the patient with the immunosuppression medication if both pairs are AT and using alternative treatment if one pair is AT and one pair is GC or if both pairs are CG.

8. The method of claim 7, wherein the immunosuppressive medication is selected from the list in Table 2.

9. The method of claim 8, wherein the immunosuppressive medication is everolimus.

10. The method of claim 7, wherein the alternative treatment comprises the addition of a cholesterol-lowering medication chosen from those listed in Table 1.

11. A method to determine the degree of serum cholesterol elevation which will occur in a patient during treatment with an immunosuppressant medication comprising:

a) determining, for the two copies of the chromosome containing the IL-1β gene, present in the patient, the haplotype with regard to the IL-1β gene and,

b) assigning the patient to a high cholesterol elevation group if both said copies contain the "high cholesterol" haplotype and,

c) assigning the patient to an intermediate cholesterol elevation group if one said copy contains the "high cholesterol" haplotype and one contains the "low cholesterol" haplotype and,

d) assigning the patient to a low cholesterol elevation group if both said copies contain the "low cholesterol" haplotype.

12. A method to treat a patient with an immunosuppressive medication comprising:

a) determining, for the two chromosomes containing the IL-1β gene present in the patient, the haplotype with regard to the IL-1β gene,

b) treating the patient with the immunosuppression medication if both said chromosomes contain the "low cholesterol" haplotype, and using alternative treatment if one said chromosome contains the "low cholesterol" haplotype and one contains the "high cholesterol" haplotype or both said chromosomes contain the "high cholesterol" haplotype.

13. The method of claim 12, wherein the immunosuppressive medication is selected from the list in Table 2.

14. The method of claim 13, wherein the immunosuppressive medication is everolimus.

15. The method of claim 12, 13 or 14, wherein the alternative treatment comprises the addition of a cholesterol-lowering medication chosen from those listed in Table 1.

16. The methods of claims 1, 2, 6, 7, 11 and 12 wherein the process of determining the identity of the nucleotide pair or the haplotype comprises finding SNPs anywhere in the said chromosome which are in linkage disequilibrium with the -511 polymorphism or the –31 polymorphism in the IL-1β gene and using the relationship of the said SNP or SNPs to determine the nature nucleotide pair or haplotype of interest.

17. A kit for determining the nucleotide pair at the polymorphic site -511 in the IL-1β gene in a patient, comprising:

a) a container containing at least one reagent specific for detecting the nature of the nucleotide pair at the polymorphic site -511 of the IL-1β gene; and

b) instructions for recommended treatment options based on the nature of the said nucleotide pair.

18. A kit for determining the nucleotide pair at the polymorphic site -31 in the IL-1β gene in a patient, comprising:

a) a container containing at least one reagent specific for detecting the nature of the nucleotide pair at the polymorphic site -31 of the IL-1β gene; and

b) instructions for recommended treatment options based on the nature of the said nucleotide pair.

19. A kit comprising the kits of claims 17 and 18 with instructions for determining the nature of the haplotype of the IL-1β gene from the results of the above kits and instructions for recommended treatment options based on the nature of the indicated haplotype.